

Utah Weekly Pertussis Update

2018 data, through MMWR week ending October 20, 2018 (MMWR week 42)

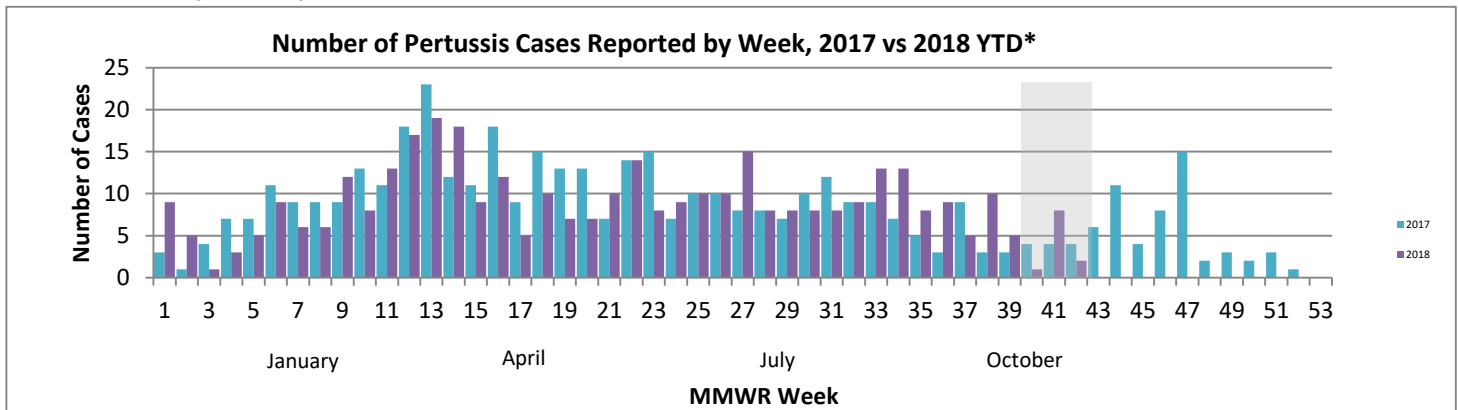
Data presented in this report are based on current data available and will be subject to change weekly.

Data Summary

Total number of cases reported, 2018 year-to-date (YTD)	372	Utah Incidence rate, 2018 year-to-date (YTD) per 100,000 person-years	15.1
Total number of cases reported 2017	439	Utah Incidence rate, 2017 per 100,000 person-years	14.6
Number of cases reported in past week	2	National Incidence rate*, 2016 per 100,000 person-years.	4.7
Total number of cases reported, through same time period 2017	384	2018 Hospitalizations	16
Age groups with the highest rates	<1 1-4	2018 Cases in infants <1 year	28

*National Incidence Rate is updated as released by the Centers for Disease Control and Prevention.

Number of cases reported by week



*Additional cases may have occurred, especially in the most recent 3 weeks that have not yet been reported, as indicated by the grayed out section of the graph above.

2018 Year-to-Date Incidence Rates, By Age

Age (years)	2018 Cases	2016 population	Rate*
<1	28	51,162	67.9
1-4	42	202,288	25.8
5-14	87	520,247	20.8
15-24	100	491,359	25.3
25-34	20	448,845	5.5
35-44	40	410,933	12.1
45-54	28	314,060	11.1
55-64	8	291,159	3.4
65+	18	321,164	7.0
Unknown	1	-	-
Total	372	3,051,217	15.1

* Rate is calculated per 100,000 person years.

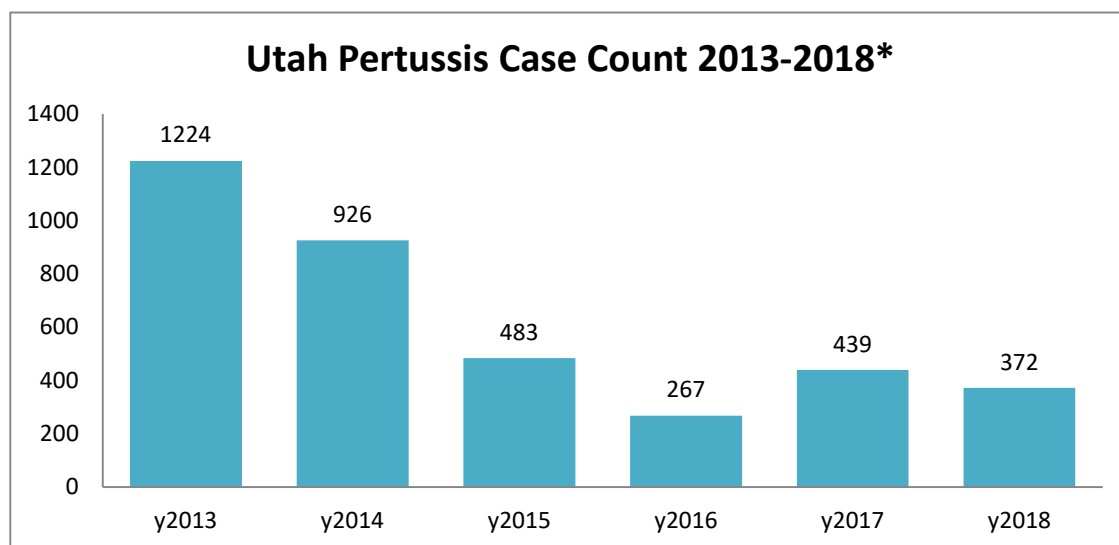
Infants less than 1 year of age have historically had the highest incidence rates of pertussis due to their susceptibility.

School Age Incidence Rates, 2018 Year-to-Date

Grade	Age (years)	2018 Cases	2016 Population	Rate*
Preschool	3-4	13	100,804	16.0
Kindergarten	5	7	50,541	17.2
1	6	8	52,444	18.9
2	7	6	52,797	14.1
3	8	9	53,837	20.8
4	9	7	53,515	16.2
5	10	13	52,433	30.8
6	11	8	52,420	18.9
7	12	9	51,616	21.6
8	13	9	51,136	21.9
9	14	11	49,508	27.6
10	15	23	49,763	57.4
11	16	32	49,882	79.6
12	17	19	48,431	48.7

* Rate is calculated per 100,000 person-years. School age incidence rates were calculated using the average age of a student in each grade. High incidence rates in 5th and 6th grade may be due to waning immunity.

Utah Case Counts of Pertussis, 2013-2018* Year to Date



Pertussis tends to be cyclical. Reports have increased in Utah since 2010, peaked in 2012, and are currently trending downward.

* 2018 data includes pertussis cases reported year to date. 2013-2017 data reflects cases reported during the entire calendar year for each year.

Incidence of Pertussis by Local Health Department, 2018 YTD

Local Health Department	2018 Cases	Rate*
Bear River	29	20.2
Central Utah	1	1.6
Davis County	38	13.8
Salt Lake County	146	16.2
San Juan County	1	7.3
Southeast Utah	2	6.2
Southwest Utah	10	5.4
Summit County	3	9.2
Tooele County	2	3.8
TriCounty	1	2.1
Utah County	93	19.5
Wasatch County	4	16.3
Weber-Morgan	43	20.6

* Rate is calculated per 100,000 person-years using 2016 Utah population estimates.

